

survival (PFS) defined as no biochemical relapse (two consecutive rises in prostate-specific antigen [PSA] with a velocity >0.4 ng/ml per year or PSA >1.5 ng/ml) and no additional treatment. Adverse events in terms of genitourinary and gastrointestinal toxicity were reported.

Results: The mean follow-up of the 121 patients was 32.7 months and total 11 patients underwent salvage radiotherapy. Six patients received SRT and hormone therapy. Five patients received SRT alone. 6-month progression-free survival was observed in total 6 patients receiving SRT and hormone therapy achieved. However, biochemical relapse was documented in two patients, 9.47 and 12.20 months after salvage treatment completed, respectively. Among 5 patients receiving SRT alone, two patients encountered treatment failure. There is 1 patient who had histologically proven local relapse. 6-month progression-free survival was observed in the other 2 patients. Salvage radiotherapy was discontinued on 1 patient, who developed grade 4 ileus after 2400 cGy of radiation. There was also 2 patients getting grade 3 gastrointestinal toxicity, bloody stool and anal ulcer with bleeding, respectively. Otherwise, gastrointestinal toxicity was low. All genitourinary toxicity are grade 1–2. Three patients had no genitourinary symptom.

Conclusion: In this preliminary study, combined radiotherapy and hormone therapy seemed provided satisfactory oncologic control after for salvage treatment after primary HIFU failure. Though genitourinary and gastrointestinal toxicity were usually low, Grade 3–4 toxicity was still noted. These results warrant further and longer investigation.

MP6-2.

PSA FLARE IN METASTATIC CASTRATION-RESISTANT PROSTATE CANCER PATIENTS TREATED WITH ABIRATERONE OR DOCETAXEL

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Purpose: The aim of this study was to assess PSA flare up phenomenon in the treatment of metastatic castration-resistant prostate cancer (mCRPC) patients with abiraterone or docetaxel and to correlate with clinical outcome.

Materials and Methods: We retrospectively evaluated 92 patients with metastatic castrate-resistant prostate cancer (CRPC) either treated with abiraterone or docetaxel at our institution. Baseline serum PSA levels were checked before treatment and followed by monitoring every 4 weeks in the group of abiraterone and every cycle in the group of docetaxel. The PSA flare phenomenon was evaluated. Clinical outcomes were evaluated to compare survival between groups of patients according to variations of PSA level.

Results: Of 92 patients, 73 patients received docetaxel therapy and 19 patients treated with abiraterone. They were classified into four groups: stabilization (PSA decline <50%), PSA progression, primary responder (PSA decline \geq 50%), and flare-up phenomenon. Six patients (8.2%) got docetaxel therapy and two patients (10.5%) got abiraterone therapy were identified with PSA flare phenomenon. We compared the overall survival between group of PSA decline > 50% with the flare-up group. There was no statistical difference in survival between two groups.

Conclusion: There is a considerable portion of mCRPC patients experience PSA flare under either abiraterone or docetaxel therapy. There was no statistical difference in survival between PSA responder and PSA flare-up phenomenon group. Patients should be informed of this effect to avoid early, and thereby inadequate, discontinuation of treatment.

MP6-3.

SYSTEMIC REVIEW OF MALIGNANCY AFTER ILEOCYSTOPLASTY

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Purpose: The incidence of post-ileocystoplasty malignancy is low and most published reports were case reports and only few single-cancer retrospective cohort study presented. Therefore, we systemically reviewed the published reports to pool the results for analysis to more clearly illustrate the characteristics and prognosis of malignancy associated with ileocystoplasty.

Materials and Methods: We did a systemic search of the PubMed® and Cii for all cases with the following keywords: cystoplasty, enterocystoplasty, ileocystoplasty, ileum, urinary diversion, and malignancy or bladder cancer. The additional records on this topic were identified from references cited in the selected articles and previous review articles on this topic. Two of the authors (CWL and SJC) independently did the literature search and data extraction. The parameters retrieved from the reports included baseline patient characteristics, latency period, indications for surgery, presenting symptoms and signs, histological type, locus of tumor, follow-up period and survival which were analyzed with commercial software (Medcalc®, version 9.3, USA).

Results: There were 41 articles selected and analyzed prudently with 56 cases included in the review. The reported incidence ranged from 0.9% to 5.5% in patients underwent ileocystoplasty. The average age was 53.0 ± 11.8 years old. Most malignancy occurred 15 years after ileocystoplasty (47/56, 83.9%) and the most commonly presenting symptoms were gross hematuria (60.0%). The locations of malignancy were mainly located at the ileobladder junction. Adenocarcinoma is most commonly observed histology among all cases (39/56) while urothelial carcinoma predominated in cases with neurogenic bladder (5/10). 17 of 45 patients (37.8%) presented with advanced disease and poor prognosis (median survival time was 6.0 months).

Conclusion: The systemic review revealed low incidence of post-ileocystoplasty malignancy with majorly poor prognosis. Yearly cystoscopy surveillance may not be indicated in case within 15 years post-operatively except symptomatic patients.

MP6-4.

A PRELIMINARY REPORT: THE APPLICATION OF HO-YAG LASER IN TURBT WITH ENBLOC METHOD

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Purpose: The traditional TURBT surgery still have several drawbacks include fragmentation, cauterization effect and easily disorientation. In here, we reviewed our patients receiving laser en bloc TURBT to compared the traditional TURBT with the feasibility, oncology outcome and complication rate.

Materials and Methods: We reviews patients newly diagnosed and received TURBT surgery in our hospital from 2011 to 2014. Patients who were loss of following up/ under unresectable status were all excluded. The age, body weight, height and sex were all recorded. The number, grade and stage of tumor were all recorded. Also, the complication during the operation were also reviewed based on medical record.

Results: From 2011 to 2014, there were 10 patients received laser TURBT and 52 patients received traditional TURBT surgery. The detrusor muscle harvest rate was 91.6% in Laser TURBT group and 77.4% in traditional TURBT group ($p=0.44$). The mean following time was 25.5 months (Median 23.1 months). The total recurrence rate was 11.9% (2/9) in Laser TURBT group and 22.4% (13/58) in cTa/ cT1/ cT2 group. In comparison the recurrence rate in T1/ Ta group, the detrusor muscle (+) group has lower recurrence rate in both laser TURBT group (25.0%) and traditional TURBT group (24.2%) than the detrusor muscle (–) group (40%). All the procedures have no complication recorded.

Conclusion: The application of laser with En-bloc method in TURBT is a good alternative which could increase the diagnosis accuracy and lower the recurrence rate.

MP6-5.

COMPARISONS OF FUNCTIONAL OUTCOMES AND QUALITY OF LIFE AFTER NEOBLADDER RECONSTRUCTION: PROSTATE-SPARING CYSTECTOMY VERSUS RADICAL CYSTOPROSTATECTOMY

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Purpose: To compare functional outcomes on erectile function, continence, voiding functions, and life quality among bladder patients underwent neobladder reconstruction after prostate-sparing cystectomy (PSC) and conventional radical cystoprostatectomy (CRC).

Materials and Methods: We recorded I-PSS, IIEF, European Organization for Research and Treatment of Cancer Quality of Life Questionnaire-Core 30-item questionnaire (EORTC-QLQ-C30), catheterizations, and measure urinary flow and residual urine to evaluate the functional outcomes and in the baseline, post-operation 1 and 2 years among the patient with bladder cancer which received PRC and CRC.

Results: During 2007 to 2013, we identified 23 males with bladder cancer who underwent neobladder reconstruction, 13 patients with PRC and the other 10 patients with CRC. We found that there were better sexuality preservation, continence rate and better global health status, functional scales, and symptom scales in the PRC group.

Conclusion: For patients with bladder cancer underwent neobladder reconstruction, prostate-sparing cystectomy provides better sexuality preservation, continence rate, and quality of life.

MP6-6.

MAMMALIAN TARGET OF RAPAMYCIN INHIBITOR AND TRANSARTERIAL EMBOLIZATION OF TUBEROUS SCLEROSIS COMPLEX-ASSOCIATED RENAL ANGIOMYOLIPOMA: A CASE SERIES

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Purpose: Renal angiomyolipomas (AML) are benign tumors composed of blood vessels, smooth muscle cells and fat cells. AML-related chronic kidney disease and tumor bleeding are the main cause of mortality. AML are highly associated with Tuberous Sclerosis Complex (TSC) and mostly be treated by mammalian target of rapamycin inhibitor (mTORi) therapy or transarterial embolization (TAE).

Materials and Methods: Here we present our cases of TSC-associated renal AMLs treated with monotherapy or combined treatment of mTORi and TAE. A total of 19 patients (4 males and 15 females) were included. There were 10 patients treated by mTORi only and 9 by combined therapy with mTORi and TAE.

Results: The mean age of the patients was 34.5 (14–72) years. The maximal diameters of renal AMLs were from 1.5 to 20.9 (9.3±6.1) cm. During a mean follow-up duration of 43 (6–81) months, the size of AMLs decreased 15–33% in 8 patients receiving combination therapy. Two patients undergone monotherapy experienced 30–50% increase of tumor diameter. The tumor size of other patients showed no statistically significant change.

Conclusion: TSC-associated AMLs are quite common in this hereditary, complex syndrome. They are usually multiple and bilateral. The lesion usually progress over time and complicated with flank pain, hemorrhage, and even renal deterioration. TSC-associated AMLs can be treated by medication or minimally invasive therapy. Our result discovered although the tumor size may not shrink, TAE still play an important role in management of tumor bleeding with acceptable complications. In our study, combination therapy showed better control of tumor size than monotherapy alone in TSC-associated AMLs.

MP6-7.

CHARACTERISTICS OF MEN YOUNGER THAN 55 YEAR-OLD RECEIVING TRANSRECTAL ULTRASOUND PROSTATE NEEDLE BIOPSY (TRUS BIOPSY)—THE EXPERIENCE OF THE COMMUNITY HOSPITAL

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Purpose: Early detection of prostate guideline from American Urological Association (AUA) in 2013 does not recommend routine prostatic specific antigen (PSA) screening in men younger than 55 year-old at average risk. The purpose of this study is to investigate the characteristics of TRUS biopsy for patients younger than age of 55, in a hope to assess the benefit of TRUS biopsy and the occurrence of prostate cancer in this population.

Materials and Methods: Based on retrospective medical records, 812 male patients who received TRUS biopsy during December 2007 to December 2014 at Zhongxiao Branch of Taipei City Hospital were included. Of them, 57 men (7%) were younger than fifty five year-old. We compare the age, pre-biopsy, PSA, prostate size, and adenoma size between prostate cancer group and benign prostatic hyperplasia group.

Results: In these 57 men, 6 of them (10.5%) had prostate cancer (group A), and 51 men had benign prostatic hyperplasia (group B). The average age of the group A and B was 51.0 ± 3.7 and 50.8 ± 3.1 year-old (P=0.23). The mean PSA of group A and B was 15.3 ± 12.3 and 7.2 ± 4.5 ng/ml (P<0.05). The mean prostate size of group A and B was 23.3 ± 6.1 and 33.6 ± 14.8 ml (P=0.04). The mean adenoma size of group A and B was 8.7 ± 3.0 and 10.3 ± 5.5 ml (P=0.12).

Conclusion: Among selected male patients younger than age of 55, TRUS biopsy was with a positive detection rate of 10%, and prostate cancer may be detected in patients with higher level PSA and smaller prostate size.

MP6-8.

THE CLINICAL EFFICACY OF NEOADJUVANT CHEMOTHERAPY ON UROTHELIAL CARCINOMA OF THE BLADDER: A RETROSPECTIVE ANALYSIS FROM A SINGLE-CENTER IN TAIWAN

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Purpose: Current evidence supports neoadjuvant chemotherapy in the treatment of advanced bladder cancer. We intend to compare clinical outcomes in patients treated for MIBC with neoadjuvant chemotherapy at our institution.

Materials and Methods: We retrospectively reviewed total 26 patients received neoadjuvant chemotherapy from Jan. 2012 to Feb. 2016 in Linkou Chang Gung Memorial Hospital. Twenty of 26 patients completed neoadjuvant chemotherapy, followed by radical cystectomy and urothelial bladder carcinoma was pathologically proven.

Results: The median time from diagnosis to operation is 3.45 months (1.38–3.65). Two of 20 (10%) patients have pathological complete response, Ten of 20 (50%) patients have partial response and Two of 20 (10%) have stable disease. The mean time of disease free survival (time from surgery to recurrence) is 22.47 months. The mean time of overall survival (time from surgery to recurrence) is 25.72 months

Conclusion: Our data revealed that neoadjuvant chemotherapy in bladder cancer have 10% complete response rate and significant downstaging of urothelial carcinoma with 60%. However, more such studies with larger sample sizes and longer follow-ups are needed and we intend to standardize the regimen of neoadjuvant chemotherapy to evaluate the efficacy much precise.

MP6-9.

CAPSAICIN INDUCES APOPTOSIS AND CELL CYCLE ARREST IN BLADDER CANCER TSGH-8301 CELLS

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Purpose: To explore the involvement of tNOX in capsaicin-exposed bladder cancer cells, particularly, apoptotic signaling pathways.

Materials and Methods: In this study, we investigated the effect of capsaicin on human bladder cancer cell lines TSGH 8301, and tried to clarify the relevant inhibition of cancer of the mechanism. The cell numbers were detected by flowcytometry. ROS and MMP assay were used to check cell survival stress and mitochondrial permeability. Western blot analysis was used to study protein expression profiles of apoptosis and cell cycle arrest.

Results: We found that the TSGH 8301 cell growth was inhibited by capsaicin with dose dependent and there was significant cell apoptosis. The cell cycle arrested at G1 / S phase. The ROS assay and MMP assay significantly revealed increased cell survival stress and mitochondrial permeability. By the Western blot analysis, we found that in 100uM and